

REMARKS

Favorable reconsideration in view of the previous amendments and following remarks is respectfully requested.

Claims 1-9 are pending. By this Amendment claims 1 and 8 are amended.

The Office Action rejects claims 1, 2, and 7-9 under 35 U.S.C. §102(b) over U.S. Patent No. 4,322,665 to Landgraf, claims 3-6 under 35 U.S.C. §103(a) over Landgraf in view of JP 11-125183 to Naguchi et al. and claim 6 under 35 U.S.C. §103(a) over Landgraf. These rejections are respectfully traversed.

Claim 1 recites, in combination with other claimed features, at least five notches each having a roughly straight lined shape on an outer circumference edge of the stator iron core, so that a quadrangle is formed by straight lines including four notches out of the at least five notches. These claimed features encompass Applicants' exemplary embodiment as illustrated in Fig. 1 wherein notches 2 are formed on an outer circumference edge of the stator iron core 1.

The Landgraf patent discloses in Fig. 2 and as described on page 3 of the Office Action, portions of 1, 2, 4 and 6 (as shown in the Office Action) which include tabs which protrude from the outer circumference edge of the stator iron core. Thus, portions 1, 2, 4 and 6 do not show a roughly straight lined shape as in Applicants' claim 1. Portions 3 and 5 described on page 3 of the Office Action do not have a roughly straight lined shape on an outer circumference edge of the stator iron core. All of the edges in portions 3 and 5 are curved.

By providing five notches each having a roughly straight lined shape on an outer circumference edge of the stator iron core, a quadrangle is formed. Thus, it is possible to reduce an area of the electromagnetic steel sheets necessary for

blanking the stator iron core. This improves the material layout resulting in a reduction of costs for the single-phase motor.

Applicants' independent claim 9 recites, in combination with other claimed features, a semicircular notch having an approximately same width as the stator teeth on an outer circumference of the stator iron core. Such a feature encompasses Applicants' exemplary embodiment as illustrated in Fig. 8 wherein semicircular notch 2 has approximately the same width as the stator tooth 12. The notch referenced by the Examiner in Landgraf corresponding to arrow 5 on page 3 of the Office Action is not semicircular. The magnetic flux density of the coreback is high at the outer circumferential side of the slot, and the width of the coreback is large at the outer side of the teeth. Because the width is large, that magnetic flux density does not become high, specifically, the magnetic flux density is not saturated even if the roughly semicircular notches are provided. Thus, it is possible to address the increase of the electric current which flows through the windings. Therefore the increase of the magnetic flux density can be addressed and the efficiency can be enhanced.

The dependent claims are allowable for at least the reasons discussed above as well as for the individual features they recite.

Naguchi does not overcome the deficiencies of Landgraf noted above.

Early and favorable action with respect to this application is respectfully requested.

Should the Examiner have any questions regarding this Amendment of the application in general, he is invited to contact the undersigned at the number provided below.

Respectfully submitted,

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